IMCA Safety Flash 30/16

November 2016

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learnt from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links Additional links should be submitted to info@imca-int.com

Any actions, lessons learnt, recommendations and suggestions in IMCA safety flashes are generated by the submitting organisation. IMCA safety flashes provide, in good faith, safety information for the benefit of members and do not necessarily constitute IMCA guidance, nor represent the official view of the Association or its members.

Summary

This safety flash has no central theme, but allows publication of a number of incidents outstanding, that do not fit into the themes of recent and forthcoming flashes.

1 Fatal Fall from Tug Svitzer Moira

The UK Marine Accident Investigation Branch (MAIB) has published a report into a fatal accident when a crew member fell and was crushed as the tug *Svitzer Moira* was being manoeuvred alongside an unmanned tug at Royal Portbury Dock, Bristol, on 29 December 2015.

The MAIB summary highlights the following key issues:

- No toolbox talk took place the job was deemed as routine by the crew and assumptions were made. A toolbox talk, prior to any hazardous task, is a good opportunity for all crew to have an input, and to ensure all share the same common goal;
- The engineer was not wearing the appropriate personal protective equipment (PPE) at the time of this tragic accident, though it is unlikely that its use would have changed the outcome;
- The investigation found shortcomings in the oversight and control of deck operations and lapses in the use of PPE, indicative of a significant divergence between company instructions and working practices on board that had not been corrected by shore management.

The full report can be downloaded here.

2 LTI: Eye Injury Following Incident with Microwaved Food

A member has reported an incident in which someone suffered an eye injury following being hit in the face by food

taken from a microwave oven. The incident occurred when a crew member reheated pre-cooked poached eggs by covering them in water in a bowl covered with pierced cling film and heating in a microwave oven. The eggs were reheated at two cycles of two minutes at 900W of power and then removed from the oven. Approximately a minute after removal from microwave, the contents of the bowl blew up into the person's face. Despite the wearing of prescription safety glasses (see photo) and the prompt action of an



adjacent crew member in applying copious amounts of cold water, a resultant burn to the eye necessitated a medevac for assessment and further treatment onshore.

Fortunately the burns, although painful, healed rapidly and the injured person was able to return to work after two weeks.

Our member's investigation revealed the following contributory factors:

- Although the reheating of pre-cooked poached eggs occurred frequently, there was no standard method or written instructions for doing so;
- The 'normal' method of immersing the eggs in several changes of hot water was not universally understood;
- The warnings in the microwave oven instruction book regarding the heating of poached eggs was not heeded (the yolk has to be pierced before heating);
- There were no warning signs posted on or adjacent to the microwave oven;
- Familiarisation training for new crew did not include the use of this equipment;
- There was poor perception of the risks inherent in the use of a microwave oven;
- There was no recognition of it being 'work equipment'. As a consequence, no importance was attached to a suitable or sufficient risk assessment for the microwave oven or any other pantry equipment, or to risk assessment for associated pantry/mess-room tasks not part of the normal professional operation of the galley.

Members may wish to refer to the following incident (search word: *microwave*):

• IMCA SF 01/00 – Incident 5 – Microwaving water.

3 Scalding Injury to Crew Member

The Marine Safety Forum (MSF) has published a safety alert about an incident in which a crewman on a vessel suffered scalding injuries to his arms. The incident occurred during topping up of the cooling system of the main engines.

On the day before the incident, main engine cooling water tests were conducted in line with the planned maintenance system. These tests showed a need to top up the chemicals in the cooling water of three of the four main engines.

On the morning of the incident the injured person, an engine cadet, was working under the supervision of the second engineer. He was tasked with topping up the chemicals in the cooling system of the main engines. Two of the three engines requiring top up were completed, after which the injured person was sent to continue a painting task he had previously been given.

At 12:00 the vessel was called in to work near the installation they were attending – at the same time there was a shift change and the third engineer took over watch keeping duties. The appropriate list of checks was completed and the vessel was alongside the installation ready to work at 12:42, with all four engines on line.

At 13:15 the injured person returned from lunch and informed the third engineer that he had completed the painting task assigned to him earlier in the day, and asked if there were other tasks that needed completing. The third engineer, keen to clear the outstanding planned maintenance, asked that the injured person complete the topping up of the cooling system on the remaining engine. The injured person accepted the task and proceeded to the engine room. The engines on board had a lower temperature and a higher temperature header tank. Both required topping up.

At approximately 13:19, he removed the cap from the high temperature header tank on main engine no. 3. As the engine was running, the removal of the cap released 90°C water at 7 psi, spraying it across both forearms of the cadet, causing second degree burns to both arms.

First aid treatment was given on board. Following medical advice from shore side medical support, the vessel diverted to port to send the injured person to hospital for further treatment. Subsequent to that further hospital treatment he returned home the next morning to the care of his local doctor.

The MSF safety alert identifies the following causes of the incident:

- The third engineer, supervising the injured person, was on his first trip as a newly qualified officer. He had had insufficient time for thorough familiarisation before starting sole watch keeping duties, to provide the knowledge and experience of the vessel for him to be deemed genuinely competent in the operation of that vessel;
- Given his lack of understanding and knowledge of the machinery on board, the third engineer was not aware that the cap must not be removed from the HT header tank whilst the engine was in operation or until cooled down following operations;
- The injured person, being a cadet and having carried out the task previously, accepted without question that the task should be carried out whilst the engine was running and whilst the vessel was within the 500m zone.

IMCA notes the importance of communication, particularly at shift and crew handover.

The following **corrective actions** were identified by the MSF and the company submitting the incident:

- All new joining crew, whether recently qualified or new to the vessel, should be given time for thorough familiarisation of all aspects of their duties on board;
- Assumptions should not be made that, because a newly qualified officer has passed his or her Certificate of Competency, they are instantly competent to undertake unsupervised watch keeping. An assessment should be made of the individual's competence prior to transfer of such responsibility;
- No maintenance should take place on machinery, either running or in standby mode, whilst in the 500m zone;
- Cadets have the same authority and responsibilities to **stop the job** as all other crew members. The purpose of cadetships is to learn and develop if cadets are unsure, ask!
- Consider the use of a warning sign (where not already present) to not release the filler cap when the engine is running and/or the coolant is hot.

The full report can be found here.

Members may wish to refer to the following incident (search word: *scalded*):

• IMCA SF 22/16 – Incident 5 – Crewman badly scalded during tank cleaning.

4 Near Miss: Hose Parted

A member has reported an incident in which a hose parted. The incident occurred whilst an anchor handling tug

(AHT) was delivering deck cargo and fuel oil to a drill ship. Crew noticed that the hose was fouled below the water line of the AHT. Pumping was immediately stopped and the hose was blown down. The hose was then disconnected from the vessel manifold. An attempt was made using the drill ship crane to pick up the hose but this was unsuccessful. The AHT tried to clear the hose by going closer to the drill ship. Attempts were made to use both the AHT vessel crane and the drill ship crane to free the hose, and while this was happening, the hose parted. No oil leak was observed.

Our member noted the following:

 Root Cause: Floatation collars were missing on the hose;



• The parted hose could have fouled the ship's propeller resulting in a dangerous situation;

• Lessons Learnt/Preventive Action:

- the length and condition of the hose should be checked before work starts
- where necessary, floatation collars should be used on hoses
- willingness to **stop the job** needs reiterating.

Members may wish to refer to the following incidents (search words: *hose, parted, fouled*):

- IMCA SF 03/13 Incident 3 Bunkering hose cut by propeller;
- IMCA SF 04/14 Incident 3 Oil spill incident;
- IMCA SF 01/15 Incident 7 Unplanned release of 960 litres of hydraulic oil.

5 Life Jacket Maintenance

The United States Coast Guard (USCG) has published marine safety alert No. 13/16 regarding the importance of routine maintenance, service, and inspection of inflatable life jackets.

The safety alert reminds all users of inflatable life jacket users of the importance of performing periodic maintenance on their equipment. The USCG notes that fatalities have been documented where inflatable life jackets have failed to inflate properly.

Further information can be found here.

